IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 6, April 2024

Survey on A Smart Medical System on Drug Analysis using ML Algorithms

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Abstract: Online health communities continue to offer huge variety of medical information useful for medical practitioners, system administrators and patients alike. In this system we collect real time health posts from reputed websites, where patients express their views, including their experiences and side-effects on drugs used by them. We propose to perform Summarization of user posts per drug, and come out with useful conclusions for medical fraternity as well as patient community at a glance. Further, we propose to classify the users based on their 'emotional state of mind'. Also, we shall perform knowledge discovery from user posts, whereby useful 'patterns' about the triad 'drugs-symptoms-medicine' is done by Association Rule Mining. Association rule mining is a popular and widely-known machine learning task. It is used to find out interesting relations between variables in large database. Rules generated by association have two disjoint set of items having form LHS (Left Hand Side) => RHS (Right Hand Side). The rule says that RHS is likely to occur whenever the LHS set occurs.

Keywords: Association Rule generation, Interesting Rule Selection, Symptoms, Disease, Medicine, Age group

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DOI: 10.48175/IJARSCT-17633



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Impact Factor: 7.53

Volume 4, Issue 6, April 2024

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DOI: 10.48175/IJARSCT-17633

